

Chip. Fuel loading on the site would be reduced by use of a wood chipper. Chips may be broadcast back onto the site, or used for hog fuel.

Fuelbreak. To create a sizeable area of reduced fuel loading for an extended distance, which will provide a break between a zone of dense fuels and a group of structures.

Sh. Intended to denote removal of shrubs. This notation was not used in the assessment. See Mow for work that deals with shrubs.

Mow. To reduce fuel loading by removing shrubs or brush near a structure using some mechanical means. Chain saws or brush cutters would normally be the tools used. Removal of shrubs and brush will reduce the amount of fuels capable of being a ladder into the upper crown for fire.

RESULTS OF THE FIELD ASSESSMENT

RURAL SITUATION

During the field assessment, it became obvious that three factors were most influential in evaluating a particular property's exposure to risk from fire. Those factors were all related to forest fuels and their relationship to the building being observed. To begin with the fuel model that is around a building is perhaps most important. Second is how close to the building are the forest fuels. And third, if low and dense ladder fuels are close to the building, probability that the building will not survive a nearby fire is greatly increased. The other factors, aspect, slope and wind exposure, although important, do not seem to carry the same weight in evaluating risk as do the factors that involve the fuels.

To establish a property's relative risk in the event of a nearby forest fire, the following criteria were used for the designation High Risk:

A fuel model that is moderate/high risk; with ladder fuels less than 10 feet; and with building exposure less than 25 feet.

OR

A fuel model that is high risk; with ladder fuels less than 10 feet; with building exposure 25-50 feet; and with at least one other risk factor in the high category.

Using these criteria, 744 of the 1085 buildings evaluated (69%) are rated at High Risk. Those rated at Moderate Risk totaled 14 %. Low Risk properties totaled about 17 %.

The map prepared during the field assessment (See Appendix) indicates that high risk situations exist in virtually all portions of the county where human habitation exists. The proportions of high risk properties are relatively evenly spread wherever homes are located.

These results indicate that there is a definite need for forest fuel treatments around a high proportion of homes in Boundary County. The recommended fuel treatments will create three distinct benefits.

First, the treatments will create a defensible space around the buildings. This space would provide a safe place for crews to work while providing structure protection from an oncoming wild fire.

Second, the treatments will create a survivable space. This space will improve the chances that an undefended building and any occupants would survive an oncoming wildfire.

The third benefit is that this space will help fire fighters prevent a house fire from spreading into the forest, where a fire would threaten forest resources or other nearby buildings.

The summary for types of work that could reduce the risks of building exposures to fire indicates that three types of work are most prominent. Pruning was tallied as a needed treatment 591 times. Thinning was tallied 504 time. Mowing was tallied 243 times. Piling was only noted as a need three times, fuelbreaks as a need three times and chipping as a need was tallied 11 times. A combination of two or three of these treatments was frequently tallied for a given building.

CITY OF BONNERS FERRY SITUATION

There are forest fuels on the periphery, and within the residential areas of Bonners Ferry. In the assessment of wildland fire risk for the city of Bonners Ferry a slightly different approach was used for evaluation than that used in rural Boundary County. The assessment was made on an area basis, rather than on an individual home situation. The same Risk Assessment Form was used, and results were applied to the entire area that had similar conditions.

For that portion of Bonners Ferry south of the Kootenai River, about 60% of the periphery or forested inclusions in residential areas are rated to cause high risk to homes nearby. For that portion of the city north of the Kootenai River, about 34% of the forested periphery or inclusions in residential areas pose high risk to nearby homes.

Thus, our assessment indicates that there is a strong need for treatments of forest fuels in and around the City of Bonners Ferry, in order to reduce the risk of loss of life or valuable property, if a fire occurs in these fuels.

The fuels around the city are more uniform than those in the rural county situation. Only two types of fuel treatment work were tallied in the city situation, pruning and mowing

IGNITION CORRIDORS. In the assessment, a number of corridors where ignition of wildland fuels is likely, were noted.

Two major highways traverse the county. US Highway 95 courses the entire county, south to north. US Highway 2 goes from Three Mile junction to the Montana border. Potential ignitions along these routes include careless smokers and vehicle accidents that might start a fire.